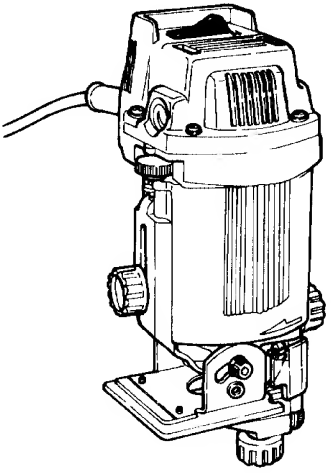
HITACHI

TRIMMER
KANTENFRÄSE
AFFLEUREUSE
RIFILATORE
KANTENFREESMACHINE
REFILADORA DE FORMICA

TR-6



Read through carefully and understand these instructions before use.
Diese Anleitung vor Benutzung des Werkzeugs sorgfältig durchlesen und verstehen
Lire soigneusement et bien assimiler ces instructions avant usage.
Prima dell'uso leggere attentamente e comprendere queste istruzioni.
Deze gebruiksaanwijzing s.v.p. voor gebruik zorgvuldig doorlezen.
Leer cuidadosamente y comprender estas instrucciones antes del uso.

Handling instructions
Bedienungsanleitung
Mode d'emploi
Istruzioni per l'uso
Gebruiksaanwijzing
Instrucciones de manejo

	English	Deutsch	Français
①	Loosen	Lockern	Desserrer
②	Tighten	Festziehen	Serrer
③	Collet chuck	Spannzange	Mandrin de serrage
④	Stopscrew (A)	Anschlagschraube (A)	Vis d'arrêt (A)
⑤	Knob bolt (A)	Rändelschraube (A)	Bouton de boulonnage (A)
⑥	Housing	Gehäuse	Boîtier
⑦	Base	Zurichttisch	Base
⑧	Stopscrew (A)	Anschlagschraube (A)	Vis d'arrêt (A)
⑨	Base (A) part	Teil (A) des Zurichttisches	Pièce (A) de base
⑩	Knob bolt (A)	Rändelschraube (A)	Bouton de boulonnage (A)
⑪	Base	Zurichttisch	Base
⑫	Base holder	Halter des Zurichttisches	Support de base
⑬	Bolt	Schraube	Boulon
⑭	Base	Zurichttisch	Base
⑮	Keep the bit separated from the material	Mit der Fräse nicht das Metall berühren	Tenir le couteau séparé du matériau
⑯	For cutting the external circumference	Fräsen der Außenkant	Pour coupe de la circonférence externe
⑰	Trimmer fedding direction	Vorschubrichtung der Kantenfräse	Direction de l'avance de la machine
⑱	For cutting inner circumference	Zurichten von Innenkanten	Pour coupe de la circonférence interne
⑲	Material	Material	Matériau
⑳	Housing	Gehäuse	Boîtier
㉑	Knob bolt (B)	Rändelschraube (B)	Bouton de boulonnage (B)
㉒	Stopscrew (B)	Anschlagschraube (B)	Vis d'arrêt (B)
㉓	Knob bolt (C)	Rändelschraube (C)	Bouton de boulonnage (C)
㉔	Guide pin	Führungsstift	Goupille de la pièce de guidage
㉕	Set the guide pin	Führungsstift einstellen	Réglage de la goupille de guidage
㉖	Bit	Fräse	Conteau
㉗	Guide pin	Führungsstift	Goupille de guidage
㉘	Knob bolt (B)	Rändelschraube (B)	Bouton de boulonnage (B)
㉙	Knob bolt (D)	Rändelschraube (D)	Bouton de boulonnage (D)
㉚	Guide holder	Halter für den Anschlag	Support de guidage
㉛	Straight guide	Parallelanschlag	Pièce de guidage droite
㉜	Knob bolt (B)	Rändelschraube (B)	Bouton de boulonnage (B)
㉝	Template guide	Schablonenführung	Guide-gabarit
㉞	Collet chuck	Spannzange	Mandrin de serrage
㉟	Template guide	Schablonenführung	Guide-gabarit
㊱	Bit	Fräse	Couteau
㊲	Base	Zurichttisch	Base
㊳	Template	Schablone	Gabarit
㊴	Shifting is caused over or this distance	Es wird eine Verschiebung um diesen Abstand hervorgerufen	Le de'placement se fait sur cette distance
㊵	Guide holder	Führungshalter	Support de guidage
㊶	Stopscrew (B)	Anschlagschraube (B)	Vis d'arrêt (B)
㊷	Trimmer guide	Zurichtführung	Pièce de gridage machine
㊸	Knob bolt (C)	Rändelschraube (C)	Bouton de boulonnage (C)
㊹	Knob bolt (B)	Rändelschraube (B)	Bouton de boulonnage (B)
㊺	Stopscrew (B)	Anschlagschraube (B)	Vis d'arrêt (B)
㊻	Knob bolt (C)	Rändelschraube (C)	Bouton de boulonnage (C)
㊼	Trimmer shoe base	Zurichtschuhplatte	Base sabot
㊽	Wear limit	Verschleißgrenze	Limite d'usure
㊾	No. of carbon brush	Nr. der Kohlebürste	N° du balai carbone

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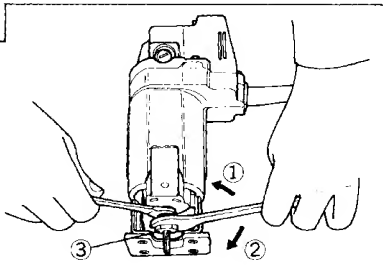

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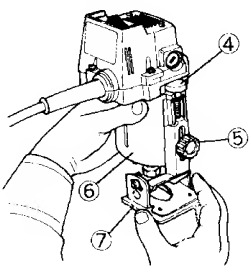

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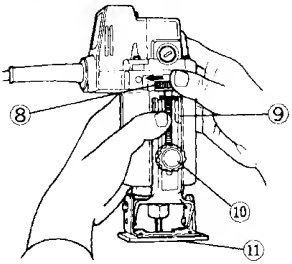

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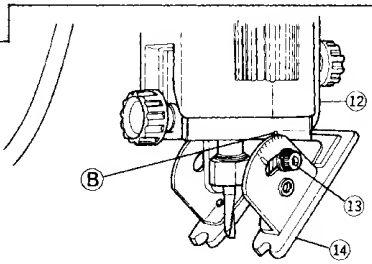

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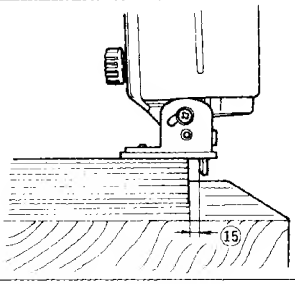

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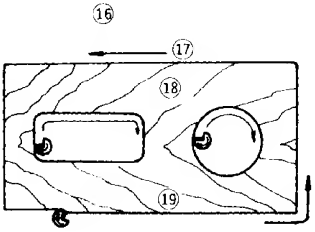

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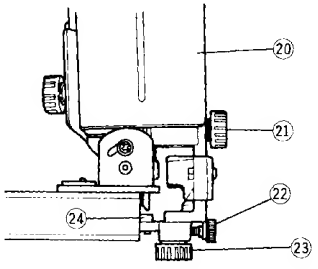

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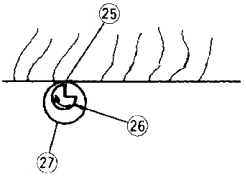

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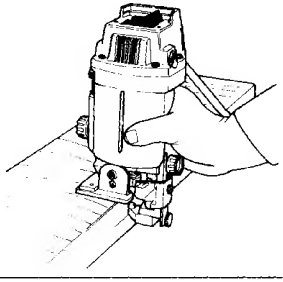

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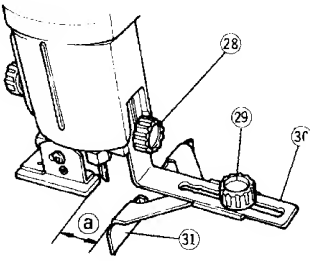

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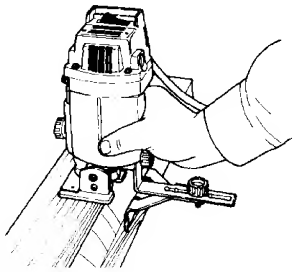

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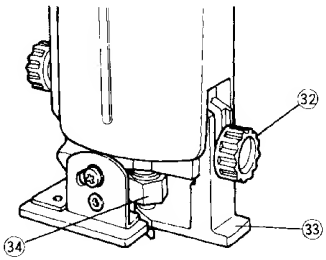

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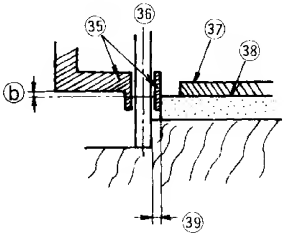

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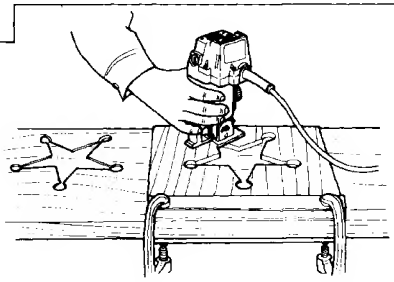

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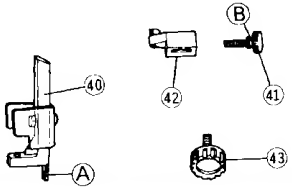

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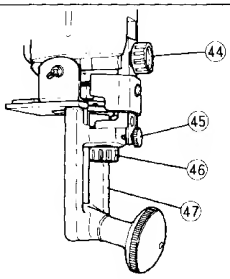

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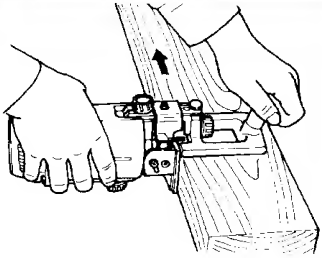

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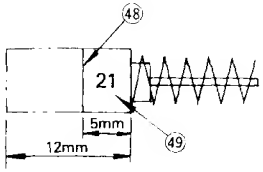


	Italiano	Nederlands	Español
①	Allentare	Losdraaien	Aflojar
②	Serrare	Vastdraaien	Apretar
③	Mandrino	Spanklem	Pinza
④	Vite d'arresto (A)	Aanslagschroef (A)	Tornillo-stop (A)
⑤	Bullone a manopola (A)	Gekartelde schroef (A)	Perno de cabeza (A)
⑥	Involucro	Kast	Carcasa
⑦	Basamento	Grondplaat	Base
⑧	Vite d'arresto (A)	Aanslagschroef (A)	Tornillo-stop (A)
⑨	Parte (A) del basamento	Deel (A) van de grondplaat	Base (A) parte
⑩	Bullone a manopola	Gekartelde schroef (A)	Perno de cabeza (A)
⑪	Basamento	Grondplaat	Base
⑫	Porta-basamento	Houder van de grondplaat	Dispositivo sujetador de la base
⑬	Bullone	Schroef	Perno
⑭	Basamento	Grondplaat	Base
⑮	Tenere la punta scostata dal materiale	Met de frees het metaal niet aanraken	Mantener la broca separada del material
⑯	Per tagliare la circonferenza esterna	Het frezen van de buitenkant	Para cortar la circunferencia externa
⑰	Senso di avanzamento della rifinitrice	Richting waarin de machine naar voren geschoven wordt	Dirección de alimentación de la cortadora de cerco
⑱	Per tagliare una circonferenza interna	Het effenen van binnenkanten	Para cortar la circunferencia interna
⑲	Materiale	Materiaal	Material
⑳	Involucro	Kast	Carcasa
㉑	Bullone a manopola (B)	Gekartelde schroef (B)	Perno de cabeza (B)
㉒	Vite d'arresto (B)	Aanslagschroef (B)	Tornillo-stop (B)
㉓	Bullone a manopola (C)	Gekartelde schroef (C)	Perno de cabeza (C)
㉔	Punta di guida	Leistift	Pasador de guía
㉕	Regolare la punta di guida	Leistift instellen	Graduar el pasador de guía
㉖	Punta	Frees	Broca
㉗	Punta di guida	Leistift	Pasador de guía
㉘	Bullone a manopola (B)	Gekartelde schroef (B)	Perno de cabeza (B)
㉙	Bullone a manopola (D)	Gekartelde schroef (D)	Perno de cabeza (D)
㉚	Porta-guida	Houder voor de geleider	Sujetador de guía
㉛	Guida diritta	Parallelgeleider	Guía derecha
㉜	Bullone a Manopola (B)	Gekartelde schroef (B)	Perno de cabeza (B)
㉝	Guida per sagoma	Schabloongeleider	Guía de patrón
㉞	Mandrino	Spanklem	Pinza
㉟	Guida per sagoma	Schabloongeleider	Guía de patrón
㊱	Punta	Frees	Broca
㊲	Base	Grondplaat	Base
㊳	Sagoma	Schabloon	Patrón
㊴	Lo scarto è causato in piú o in meno, di questa distanza	Er wordt een verschuiving om deze afstand opgewekt	Alteración está causada por encima de esta distancia
㊵	Porta-guida	Leihouder	Dispositivo sujetador de la guía
㊶	Vite d'arresto (B)	Aanslagschroef (B)	Tornillo-stop (B)
㊷	Guida della rifinitrice	Geleider voor de vlakfrees	Guía recortadora
㊸	Bullone a manopola (C)	Gekartelde schroef (C)	Perno de cabeza (C)
㊹	Bullone a manopola (B)	Gekartelde schroef (B)	Perno de cabeza (B)
㊺	Vite d'arresto (B)	Aanslagschroef (B)	Tornillo-stop (B)
㊻	Bullone a manopola (C)	Gekartelde schroef (C)	Perno de cabeza (C)
㊼	Basamento a ceppo per rifinitrice	Vlakschuurzool	Base de pie de la recortadora
㊽	Limite di usura	Slijtagegrens	Límite de uso
㊾	N. della spazzola di carbone	Nr. van de koolborstel	N° de carbón de contacto

GENERAL OPERATIONAL PRECAUTIONS

1. Keep work area clean. Cluttered areas and benches invite injuries.
2. Consider work area environment. Don't expose power tools to rain. Don't use power tools in damp or wet locations. Keep work area well lit.
   Don't use tool in presence of flammable liquids or gases.
   Power tools produce sparks during operation. They also spark when switching ON/OFF. Never use power tools in dangerous sites containing lacquer, paint, benzine, thinner, gasoline, gases, adhesive agents, and other materials which are combustible or explosive.
3. Guard against electric shock. Prevent body contact with grounded surfaces. For example; pipes, radiators, ranges, refrigerator enclosures.
4. Keep children away. Do not let visitors contact tool or extension cord. All visitors should be kept away from work area.
5. Store idle tools. When not in use, tools should be stored in dry and high or locked-up place-out of reach of children.
6. Don't force tool. It will do the job better and safer at the rate for which it was intended.
7. Use right tool. Don't force small tool or attachment to do the job of a heavy-duty tool. Don't use tool for purpose not intended – for example – don't use circular saw for cutting tree limbs or logs.
8. Dress properly. Do not wear loose clothing or jewelry. They can be caught in moving parts. Rubber gloves and non-skid footwear are recommended when working outdoors. Wear protective hair covering to contain long hair.
9. Use safety glasses. Also use face or dust mask if cutting operation is dusty.
10. Don't abuse cord. Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil and sharp edges.
11. Secure work. Use clamps or a vise to hold work. It's safer than using your hand and it frees both hands to operate tool.
12. Don't overreach. Keep proper footing and balance at all times.
13. Maintain tools with care. Keep tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect tool cords periodically and if damaged, have repaired by authorized service facility. Inspect extension cords periodically and replace if damaged. Keep handles dry, clean, and free from oil and grease.
14. Disconnect tools. When not in use, before servicing, and when changing accessories, such as blades, bits, cutters.
15. Remove adjusting keys and wrenches. Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
16. Avoid unintentional starting. Don't carry plugged-in tool with finger on switch. Be sure switch is off when plugging in.
17. Outdoor use extension cords. When tool is used outdoors, use only extension cords intended for use outdoors and so marked.
18. Stay alert. Watch what you are doing. Use common sense. Do not operate tool when you are tired.
19. Check damaged parts. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced by an authorized service center unless otherwise indicated elsewhere in this instruction manual. Have defective switches replaced by authorized service center. Do not use tool if switch does not turn it on and off.
20. Do not use power tools for applications other than those specified in the Handling Instructions.
21. The use of any other accessory or attachment other than recommended in this handling instructions or the HITACHI catalog may present a risk of personal injury.
22. Repairing must be done only by authorized service facility. Manufacturer is not responsible for any damages and injuries due to the repair by the unauthorized persons as well as the mishandling of the tool.
23. To ensure the designed operational integrity of power tools, do not remove installed covers or screws.
24. Do not touch movable parts or accessories unless the power source has been disconnected.
25. Use your tool at lower input than specified on the nameplate; otherwise, the finish may be spoiled and working efficiency reduced due to motor overload.
26. Do not wipe plastic parts with solvent. Solvents such as gasoline, thinner, benzine, carbon tetrachloride, alcohol, ammonia and oil containing chloric annex may damage and crack plastic parts. Do not wipe them with such solvent. Wipe plastic parts with a soft cloth lightly dampened with soapy water.
27. Use only original HITACHI replacement parts.
28. This tool should only be disassembled for replacement of carbon brushes.
29. The exploded assembly drawing on this handling instructions should be used only for authorized service facility.

SPECIFICATIONS

Voltage (by areas)*	(110V, 115V, 120V, 127V, 220V, 230V, 240V) ~
Input	440 W*
No-Load Speed	30000/min
Collect Chuck Capacity	6mm or 6.35mm (1/4")
Weight (without cord)	1.6kg

*Be sure to check the nameplate on product as it is subject to change by areas.

STANDARD ACCESSORIES

(1) Trimmer Guide 1
(2) Straight Guide 1
(3) Wrench 2
(4) Hexagonal Bar Wrench 1

Standard accessories are subject to change without notice.

OPTIONAL ACCESSORIES —sold separately

(1) Template Guide
(2) Trimmer Shoe Base

Optional accessories are subject to change without notice.

APPLICATIONS

Trimming plywood, and woodworking such as beveling, rabbeting, etc.

PRIOR TO OPERATION

1. Ensure that the power source to be utilized conforms to the power requirements specified on the product nameplate.
2. Ensure that the power switch is in the OFF position. If the plug is connected to a power receptacle while the power switch is in the ON position, the power tool will start operating immediately, inviting serious accident.
3. Extension cord. When the work area is removed from the power source, use an extension cord of sufficient thickness and rated capacity. The extension cord should be kept as short as practicable.

MOUNTING AND REMOVING THE BIT

CAUTION

To prevent possible accident, ensure that the power switch is turned off, and the plug is removed from the power source.

1. Fitting the bit:
   (1) Remove the trimmer guide from the main body.
   (2) Insert the bit deeply (15mm or more from the side of the collet chuck) into the collet chuck, and securely tighten the collet chuck with the accessory wrench, as shown in Fig. 1.

   CAUTION

   Ensure that the collet chuck is securely tightened after inserting the bit. The collet chuck could be damaged if it is tightened with no bit mounted.
2. Removal of the bit:

   Loosen the collet chuck as illustrated in Fig. 1, and remove the bit.

HOW TO USE THE ELECTRIC TRIMMER

1. Adjustment of cutting depth

   The adjustment of cutting depth of this tool can be adjusted in two ways, large adjustments and fine adjustments.

   (1) For large adjustment of the base (Fig. 2)
   ① Loosen knob bolt (A) sufficiently.
   ② Slide the base to the required depth. Try to adjust the base so that the tip of the router bit and the lower surface of the base are at the required depth.

   NOTE: The stopscrew (A) is designed smaller than the threaded hole in the base, so that you may be able to make larger adjustments more efficiently by not having to thread the base and the screw, just slide the base.

   ③ Tighten knob bolt (A) firmly.

   (2) For fine adjustments of the base (Fig. 3)
   ① Loosen knob bolt (A) slightly.
   ② With the knob bolt (A) loosened slightly rotate the stopscrew (A) in the required direction to raise or lower the base.

   NOTE: The pressure from the knob bolt (A) will keep the threads aligned so that minute adjustments can be made. (1mm movement per rotation of the stopscrew (A))

   ③ Tighten knob bolt (A) firmly.
2. Adjustment of cutting angle: (See Fig. 4)

   Cutting angle can be adjusted by loosening the bolts (both sides) with the accessory hexagonal bar wrench, and moving the base to the desired position. The scale engraved on the base may be used as an approximate angular standard. Adjustment can be easily accomplished by aligning the base holder Ⓑ projection with the desired scale setting. Securely tighten the bolts with the hexagonal bar wrench after performing adjustment.
3. Cutting:

   Use of an appropriate guide is highly recommended to ensure efficient cutting operation. For details, refer to the section entitled "How to use the Guides".

   (1) As shown in Fig. 5, keep the bit separated from the workpiece before the power switch is turned ON.
   (2) The bit rotates clockwise as seen from above (in the direction indicated by the arrow on the housing). Feed the trimmer in the directions indicated by the arrows in Fig. 6.

HOW TO USE THE GUIDES

1. Trimmer guide:

   The trimmer guide is handy when performing such work as trimming and bevelling of plywood. Mount the trimmer guide to the housing with knob bolt (B). Adjust the guide pin by loosening knob

bolt (C) and rotating stopscrew (B), shown in Fig. 7, setting the guide pin to the desired position, as shown in Fig. 8. Operation is as shown in Fig. 9.

2. Straight Guide:
   The straight guide is handy when performing linear processing work such as beveling, grooving, etc. Mount the straight guide to the housing with knob bolt (B). Adjust the distance ⓐ from the bit to the surface of the straight guide by loosenling the knob bolt (D), and moving the straight guide as desired, as shown in Fig. 10. Operation is as shown in Fig. 11.

HOW TO USE THE OPTIONAL ACCESSORIES

1. Template guide:
   The template guide is handy when processing a number of materials in the same shape through use of a template. Mount the template guide to the housing with knob bolt (B), and secure it as shown in Fig. 12. Use the straight bit. Length ⓑ, shown in Fig. 13, from the base to the template guide is set at zero.
   Operation is as shown in Fig. 14.
2. Trimmer shoe base:
   The trimmer shoe base is handy for beveling, rabbeting, etc.
   Trimmer shoe base assembly:
   ° Remove the trimmer guide (standard accessory) from the trimmer guide assembly, as shown in Fig. 15. Drive stopscrew (B) into the trimmer shoe base, and attach the shoe base to the guide holder with knob bolt (C). (Insert the Ⓑ part of stopscrew (B) into the groove Ⓐ of the guide holder.) Adjust the cutting depth by loosening knob bolt (C), shown in Fig. 16, and rotating stopscrew (B).
   Feed the unit in the direction indicated by the arrow in Fig. 17. (The arrow mark shown on the trimmer shoe base)

MAINTENANCE AND INSPECTION

1. Inspecting the bit:
   Continued use of a dull or damaged bit will result in reduced cutting efficiency and may cause overloading of the motor. Replace the bit with a new one as soon as excessive abrasion is noted.
2. Inspecting the mounting screws:
   Regularly inspect all mounting screws and ensure that they are properly tightened. Should any of the screws be loose, retighten them immediately. Failure to do so could result in serious hazard.
3. Inspecting the carbon brushes: (Fig. 18)
   The motor employs carbon brushes which are consumable parts. Since an excessively worn carbon brush could result in motor trouble, replace a carbon brush with a new one when it becomes worn to or near the 'wear limit'. In additin, always keep carbon brushes clean and ensure that they slide freely within the brush holders.
4. Replacing a carbon brush:
   Disassemble the brush cap with a minus-head screwdriver. The carbon brush can then be easily removed.
5. Maintenance of the motor:
   The motor unit winding is the very "heart" of the power tool. Exercise due care to ensure the winding does not become damaged and/or wet with oil or water.

NOTE

Due to HITACHI's continuing program of research and development, the specifications herein are subject to change without prior notice.

This appliance is produced to conform to the requirements of B. S. 800:1977.*

* This requirement is applicable to appliances for UNITED KINGDOM.

IMPORTANT

Correct connection of the plug

The wires of the mains lead are coloured in accordance with the following code:

Blue -Neutral

Brown -Live

As the colours of the wires in the mains lead of this tool may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

The wire coloured blue must be connected to the terminal marked with the letter N or coloured black.

The wire coloured brown must be connected to the terminal marked with the letter L or coloured red.

Neither core must be connected to the earth terminal.

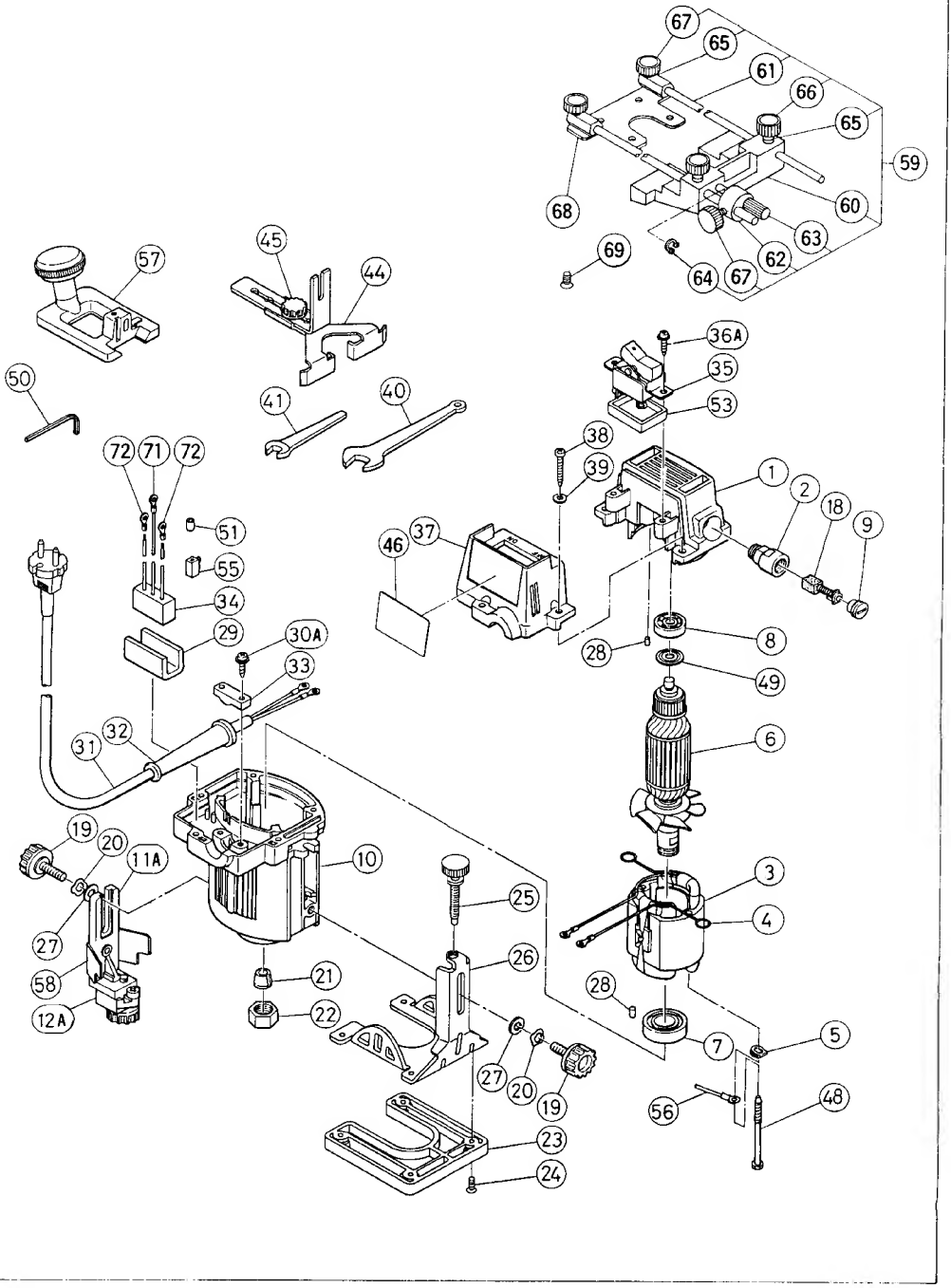
NOTE

This requirement is provided according to BRITISH STANDARD 2769: 1984.

Therefore, the letter code and colour code may not be applicable to other markets except United Kingdom.

The noise emitted by this power tool is measured in accordance with IEC 59 (CO) 11, IEC 704, DIN 45 635 Part 21, NFS 31-031 (84/537/EEC for concrete breakers). The sound pressure level at the workplace can exceed 85 dB (A) ; in this case noise protection for the operator is required.

The exploded assembly drawing should be used only for authorized service facility.



Item No.	Part Name	
1	Rear Cover Ass'y	
2	Brush Holder	
3	Stator Ass'y	
4	Brush Terminal	
5	Earth Washer	D4
6	Armature Ass'y	
7	Ball Bearing (6002VVCMPS2S)	
8	Ball Bearing (627VVMC2EPS2S)	
9	Brush Cap	
10	Housing	
11A	Trimmer Guide Ass'y	
12A	Guide Pin	
18	Carbon Brush	
19	Knob Bolt	M6×17
20	Wave Washer	
21	Collet Cone	
22	Collet Nut	
23	Sub Base	
24	Flat Hd. Screw	M4×8
25	Screw (A)	
26	Base	
27	Washer	M6
28	Bearing Lock	
29	Support (B)	
30A	Tapping Screw (W/Flange)	D4×16
31	Cord	
32	Cord Armor	
33	Cord Clip	
34	Noise Suppressor	
35	Switch	
36A	Tapping Screw (W/Washer)	D4×12
37	Switch Cover	
38	Tapping Screw	D4×25
39	Washer	M4
40	Wrench	17MM
41	Wrench	10MM
44	Straight Guide Ass'y	
45	Knob Bolt	M6×17

Item No.	Part Name	
46	Name Plate	
48	Hex. Hd. Tapping Screw	D4×60
49	Tail Washer	
50	Hexagon Bar Wrench	4MM
51	Tube (D)	
53	Rubber Packing	
55	Pillar Terminal	
56	Internal Wire Ass'y	
57	Trimmer Shoe	
58	Eye Shield	
59	Guide (B) Ass'y	
60	Straight Guide (B)	
61	Guide Bar	
62	Screw Holder	
63	Feed Screw (A)	
64	Retaining Ring (E-Type) For D5 shaft	
65	Spring	
66	Stopper Screw	M5×14
67	Stopper Screw	M5×8
68	Guide (A)	
69	Flat Hd. Screw	M4×10
71	Terminal (50051)	
72	Terminal	

Parts are subject to possible modification without notice due to improvements.